

American Society for Testing Materials BULLETIN

ISSUED



BI MONTHLY

Rationalize Our Standards

IN DEVELOPING methods of tests, as well as in the developing of specifications, the procedure must of necessity be more or less empirical. Very often, for want of fuller knowledge, nothing beyond the empirical could be done nor could specifications be developed except to meet specific needs. Through the organization of correlating committees on methods of testing and on nomenclature and definitions, we have undertaken to bring our standards into orderly relationship one with the other. This means that our standards are becoming rationalized, supplementing the empirical procedure which of necessity is the procedure which must first be followed.

We must know the reasons for our standards and specifications; where we have empirical formulas, in time they should develop into rational formulas. Let us more and more seek for the reasons that lie back of the problems confronting us.

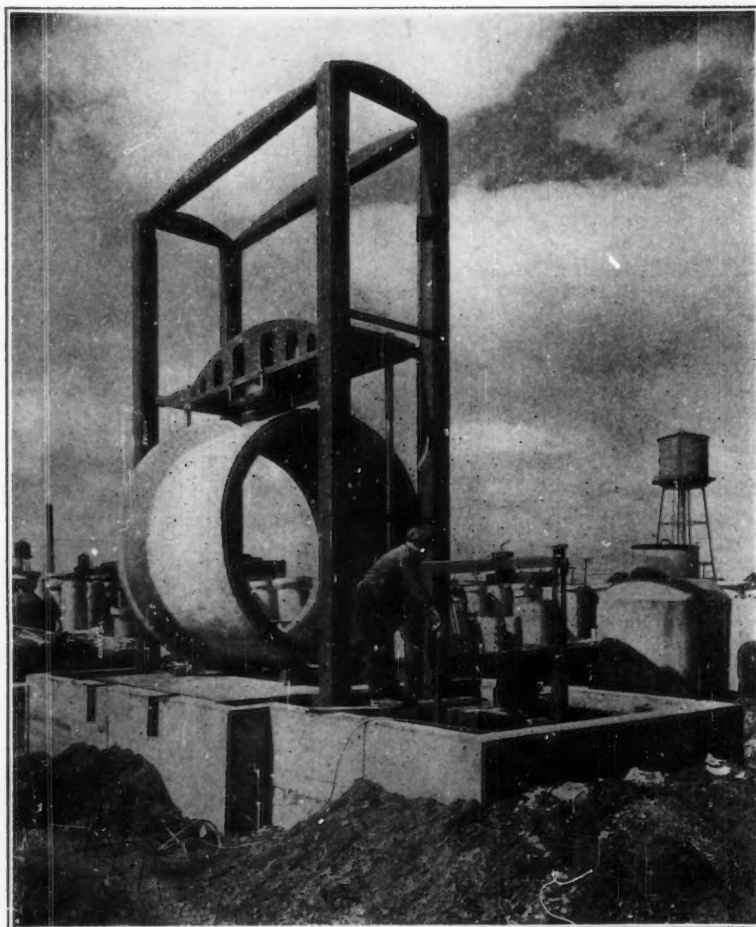
G. W. THOMPSON, *President.*

July, 1928

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American Society for Testing Materials



BULLETIN

ENGINEERS' CLUB BUILDING

1315 SPRUCE STREET

PHILADELPHIA, PENNA.

NUMBER 33

July 31, 1928

Thirty-first Annual Meeting

THE annual meeting, held at Atlantic City, June 25-29, was marked by an attendance almost equaling that of the last annual meeting in that city, held in 1926, at which a record was set for attendance. In that year the total attendance was 905. At the meeting just past the registered attendance was 902. Possibly by virtue of the large attendance or because of a program replete with so many interesting valuable reports and papers, enthusiasm ran high and many were the expressions of gratification on a very successful meeting on the part of those who attended.

There were, of course, the two sides of the Society's work to which the reports and papers contributed—standardization and the development of knowledge on materials. Which was the more prominent it would be difficult to say, for in spite of the 40 new tentative standards, the action to advance 30 tentative standards to the status of standard and the substitution of 10 revised standards for a corresponding number of existing standards, to say nothing of the revisions of tentative standards and proposed revisions of standards, the reports and papers gave many indications of the active work now being carried out on research investigations. To mention only a few, there were the reports of the Research Committee on Yield Point of Structural Steel; of the Joint Committee on Effect of Temperature upon the Properties of Metals; of the Joint Committee on Phosphorus and Sulfur in Steel; of the standing committees on corrosion; on cement; on metallography; and many other reports of standing committees; and the papers on fatigue and corrosion fatigue of metals; on wear testing of bearings, tire chains, crusher jaws, flooring, rubber; cement and concrete testing. In addition to these, the Edgar Marburg lecture and the award of the Charles B. Dudley medal both had to do with research and the promotion of knowledge of materials.

The fourteen sessions included four pairs of simultaneous or concurrent sessions. The first session, a general opening session, was held on Tuesday afternoon, June 26, followed immediately by two simultaneous technical sessions. The closing session was held on Friday evening, June 29. Except for Tuesday, the afternoons were kept open for recreation and committee meetings and for the Edgar Marburg lecture, which was held on Wednesday afternoon. The Presidential Address, together with the report of the Executive Committee, comprised the brief but interesting session held on Wednesday evening.



PRESIDENT G. W. THOMPSON

Chief Chemist, since 1892, and director of the National Lead Co. and a director and officer of a number of its subsidiary corporations. He became a member of the Society in 1903 and directed his activities principally on Committee D-1 on Preservative Coatings for Structural Materials, of which he was secretary for a number of years. He was a member of the Executive Committee in 1912-1913 and in 1916-1918 and was elected to the Vice-Presidency in 1926. In 1927 the Armour Institute of Technology conferred on him the degree of Doctor of Science for his outstanding work in the field of industrial chemistry.

Presidential Address

The President, H. F. Moore, was introduced by the presiding officer, Past-President J. H. Gibboney. The President's address dealt with the 250th anniversary of Robert Hooke's public announcement of the law of proportionality of stress to strain. President Moore portrayed Hooke as being among the first to use actual experiment in developing laws of natural phenomena, those before his time preferring to develop their laws through logic alone. His methods, perforce, were crude and in stating his conclusions, few if any data were given. The science of experimentation and of testing remained to be developed, leading up to the highly developed science of the present day. In conclusion, Professor Moore stated:

As is often the case with the formulators of physical laws, Hooke seems to have had no idea of the great importance of his law of springy bodies. He always had his vital interests in apparatus and machines and devices rather than in abstract laws—in his spring watch, in his plan for the rebuilding of the burned part of London, in his job as city surveyor to lay out the new city according to the accepted plan drawn up by Sir Christopher Wren.

Yet, whatever his limitations and his lack of vision, he has left us a great fundamental working rule which has served acceptably for a quarter of a millennium—just about as long as have the laws promulgated by the great Newton. Robert Hooke's thumbmark is on every structural shape and on every stress-carrying forging or casting; it is on every concrete arch and beam, on every timber

bent and post. He takes his place among the chemists and the metallurgists and the electricians and the steam engineers who ushered in the mechanical era. And so to-night, after 250 years, we pay tribute to Robert Hooke, the man who taught us to say 'As the stretch, so the force.'

Announcement of Election of Officers

The canvass of the ballot for officers showed that 1303 legal ballots had been cast and that the following officers were elected:

For President, to serve for one year: G. W. Thompson, Chief Chemist, National Lead Co., Brooklyn, N. Y.
For Vice-President, to serve for two years: K. G. Mackenzie, Consulting Chemist, The Texas Co., New York City.
For Members of the Executive Committee, to serve for two years:
T. R. Lawson, Head, Department of Civil Engineering, Rensselaer Polytechnic Institute, Troy, N. Y.
H. S. Mattimore, Engineer of Materials, Pennsylvania State Highway Department, Harrisburg, Pa.
P. D. Merica, Director of Research, The International Nickel Co., New York City.
S. T. Wagner, Consulting Engineer, Reading Co., Philadelphia, Pa.

The newly elected President, after being presented to the meeting, expressed his appreciation of the honor of his election to the presidency. He mentioned the very great influence that the Society can have on its members. The Society had developed something of a spirit, something of a soul, and it has an aura or an emanation tending to make each one willing to sacrifice his own individual point of view at times or at least make him willing to sacrifice his own immediate ends to the benefit of the Society. He pledged his best efforts to live up to the responsibilities that were placed upon him and expressed the hope that his administration might prove a worthy successor to the years that had passed and a precursor of better years to come.

The newly elected Vice-President thanked the members for the honor of the election, considering it an especial privilege to serve under the newly elected President.

Edgar Marburg Lecture

The third Edgar Marburg lecture was held on Wednesday afternoon. The lecturer, Dr. Frank B. Jewett, President and Director of the Bell Telephone Laboratories and a Vice-President of the American Telephone and Telegraph Co., spoke on "Some Research Problems Involved in Transoceanic Telephony." In this he followed the development of transoceanic telephony from the first trials made in 1915 to the opening of commercial service in January, 1927. The technical difficulties were many but probably one of the greatest contributions that made transoceanic telephony practicable was the development of high-power vacuum tubes, 10 kw. tubes being now in use. Administrative difficulties included the harmonizing of the different operating methods in America and Europe and the clearing by international action of the frequency channel. Short wave length working is now under investigation to make more channels available.

Award of Charles B. Dudley Medal

Following the Edgar Marburg Lecture the second award of the Charles B. Dudley medal was made to A. V. de Forest for his paper on "A Method of Graphic Representation of Magnetic Characteristics." Mr. de Forest was presented to the President by Mr. R. L. Sanford, himself an able investigator of many years standing in the study of magnetic testing. The award of the medal was made by the President and met with prolonged and hearty applause of the members present.

Action on Proposed Standards

Thirty-eight committees of the Society presented reports. Most of these recommended actions on standards. As a result of the actions on these recommendations 39 new tentative standards were accepted and 31 existing tentative stand-

ards were advanced to standard. Ten existing standards were revised and 4 standards and 1 tentative standard were withdrawn. As a result of the actions taken, the Book of Standards, with the 1928 Supplement, will now contain 370 standard specifications, methods of test, definitions, etc. In addition, the Society will have 185 tentative standards.

Entertainment Features

No efforts were spared by the Entertainment Committee, under the chairmanship of J. H. Chubb, in arranging for the several entertainment features of the meeting. The annual dance and smoker, held on Wednesday evening after the Presidential Address, was especially well attended.

There were two interesting dinners held in conjunction with the annual meeting. One was given by Committees A-6 on Magnetic Properties and A-8 on Magnetic Analysis in honor of Mr. A. V. de Forest, the Dudley medalist for the year. The other was one of the annual dinners of Committee D-2 on Petroleum Products and Lubricants, who this year had as their guest Dr. F. R. Baxter who has long been an active and distinguished member of the committee.

The golf tournament continued to be a very popular feature of the tournament features with a total of 29 entries. It was held on Friday afternoon on the course of the Seaview Golf Club. The A.S.T.M. championship golf cup was won by H. G. Farmer. The tennis tournament was also held on Friday afternoon at the Seaview Golf Club, the A.S.T.M. championship tennis cup being won by F. S. Crane. Other prize winners in golf and tennis were: A. R. Small, F. G. Breyer, F. M. Hartley, G. H. Clamer, H. H. Morgan, J. J. Howard, E. S. Taylerson, W. H. McCune, and R. J. McKay.

Research Committee on Fatigue of Metals

For some time the phenomena of the behavior of metals under repeated stress, commonly known as the fatigue of metals, has been of great interest to manufacturers and users of metals. Interest in this field has become so wide spread that at its April meeting the Executive Committee of the Society authorized the formation of a Research Committee on Fatigue Phenomena in Metals. During the annual meeting a small group of workers in this field met under the temporary chairmanship of Prof. H. F. Moore, to sketch out preliminary plans for the work of this committee.

Among the objectives of the Research Committee on Fatigue Phenomena in Metals should be the keeping in touch with workers and laboratories in this field and the preparation of occasional reports on the state of knowledge and of important problems. Bibliographical work and digests of important articles in the technical press, both American and foreign, should be carried on.

The membership of the committee should include only active workers in the field, persons who have given evidence not only of interest, but also of achievement. The possibility was considered of having associate members, interested in the problems of fatigue of metals.

While the question of financial support will be of great importance, the committee should begin work at once, as there is much work of a correlating nature which can be undertaken with the means at hand. Close contact should be maintained with similar committees in other societies, especially with committees of the American Society of Mechanical Engineers.

The members of the group were asked by the temporary chairman to suggest suitable members for the committee. Their written replies are now being received, and the committee is in process of organization.

Matters Referred to Letter Ballot

By action of the annual meeting, 10 revisions of existing standards and 31 tentative standards were referred to letter ballot vote of the membership of the Society for adoption as standard. Full information concerning all matters referred to letter ballot is given in the preprints of the committee reports issued to the members in advance of the meeting, in the account of the annual meeting appearing in this BULLETIN and in the Summary of the Proceedings. One amendment to the By-laws, given in detail elsewhere in this BULLETIN and in the Summary of the Proceedings, was also referred to letter ballot of the Society:

Article VI. Procedure Governing the Adoption of Standards.
Revision of Section 1.

REVISIONS OF EXISTING STANDARDS

Standard Specifications for:

- Carbon-Steel and Alloy-Steel Forgings (A 18 - 27), recommended by Committee A-1.
- Carbon-Steel Forgings for Locomotives (A 20 - 27), recommended by Committee A-1.
- Raw Linseed Oil (D 234 - 27), recommended by Committee D-1.
- Adhesive Tape for General Use for Electrical Purposes (D 69 - 24), recommended by Committee D-11.

Standard Methods of:

- Test for Softening Point of Fire-Clay Brick (C 24 - 20), recommended by Committee C-8.
- Routine Analysis of Dry Red Lead (D 49 - 27), recommended by Committee D-1.
- Test for Water in Petroleum Products and Other Bituminous Materials (D 95 - 27), recommended by Committee D-2.
- Test for Water and Sediment in Petroleum Products by Means of Centrifuge (D 96 - 24), recommended by Committee D-2.
- Test for Steam Emulsion of Lubricating Oils (D 157 - 27), recommended by Committee D-2.

Standard Definitions for:

- Clay Refractories (C 27 - 20), recommended by Committee C-8.

TENTATIVE STANDARDS TO BE ADOPTED AS STANDARD

Tentative Specifications for:

- Forged or Rolled Steel Pipe Flanges for High-Temperature Service (A 105 - 27 T), recommended by Committee A-1.
- Alloy Tool Steel (A 115 - 27 T), recommended by Committee A-1.
- Aluminum Bronze Castings (B 59 - 26 T), recommended by Committee B-2.
- Sand Castings of the Alloy: Copper 88 per cent; Tin 8 per cent; Zinc 4 per cent (B 60 - 26 T), revised as recommended by Committee B-2.
- Steam or Valve Bronze Sand Castings (B 61 - 26 T), revised as recommended by Committee B-2.
- Composition Brass or Ounce Metal Sand Castings (B 62 - 26 T), recommended by Committee B-2.
- Brazing Solder (B 64 - 27 T), recommended by Committee B-2.
- Yellow Brass Sand Castings for General Purposes (B 65 - 27 T), recommended by Committee B-2.
- Bronze Castings in the Rough for Locomotive Wearing Parts (B 66 - 27 T), recommended by Committee B-2.
- Car and Tender Journal Bearings, Lined (B 67 - 27 T), recommended by Committee B-2.
- Clay Fire Brick for Malleable Furnaces with Removable Bungs and for Annealing Ovens (C 63 - 27 T), recommended by Committee C-8.
- Clay Fire Brick for Stationary Boiler Service (C 64 - 27 T), recommended by Committee C-8.
- Clay Fire Brick for Marine Boiler Service (C 65 - 27 T), recommended by Committee C-8.
- Prussian Blue (D 261 - 27 T), revised as recommended by Committee D-1.
- Ultramarine Blue (D 262 - 27 T), revised as recommended by Committee D-1.
- Chrome Oxide Green (D 263 - 27 T), revised as recommended by Committee D-1.
- Commercial Para Red (D 264 - 27 T), revised as recommended by Committee D-1.

Tentative Methods of:

- Test for Magnetic Properties of Iron and Steel at Low Inductions (A 34 - 27 T), revised as recommended by Committee A-6.
- Test for Determination of Wax in Shellac ("Machine-Made" and Dry-Bleached Refined Shellac) (D 29 - 27 T), recommended by Committee D-1.
- Test for Elasticity or Toughness of Varnishes by Means of Addition of Linseed Oil (D 154 - 26 T), recommended by Committee D-1.
- Test for Saponification Number (D 94 - 21 T), revised as recommended by Committee D-2.

New Tentative Standards

Thirty-nine new tentative standards, including specifications, methods of test, definitions and a recommended practice, were accepted for publication:

Metals:

- Methods of Sampling Rolled and Forged Steel Products for Analysis.
- Specifications for Iron and Steel Chain.
- Specifications for Lap-Welded and Seamless Steel Pipe, Black and Galvanized, for Ordinary Uses.
- Specifications for Zinc-Coated (Galvanized) Barb Wire.
- Specifications for Zinc-Coated (Galvanized) Steel Wire Strand.
- Specifications for Zinc (Hot-Galvanized) Coatings on Structural Steel Shapes, Plates and Bars and Their Products.
- Specifications for the Arbitration Test Bar and Tension Test Specimen for Cast Iron.
- Specifications for Brass Ingot Metal, for Sand Castings.
- Specifications for Fire-Refined Copper Other than Lake.
- Specifications for Silver Solders.
- Specifications for Sand Castings of the Alloy: Copper 80 per cent; Tin 10 per cent; Lead 10 per cent.
- Specifications for Seamless Copper Tubes.

Gypsum and Brick:

- Specifications for Calcined Gypsum for Use in the Preparation of Dental Plasters.
- Specifications for Sand-Lime Building Brick.

Paints and Oils:

- Methods of Test for Coarse Particles in Pigments.
- Specifications for the Toxic Ingredients in Anti-Fouling Paints.
- Method of Test for Alkalinity or Acidity of Pigments.
- Methods of Test for Bleeding of Pigments.
- Methods of Test for Hygroscopic Moisture (and Other Matter Volatile Under the Test Conditions) in Pigments.
- Method of Test for Oil Absorption of Pigments.
- Methods of Test for Mass Color and Tinting Strength of Pigments.
- Method of Routine Analysis of Dry Cuprous Oxide.
- Method of Routine Analysis of Dry Mercuric Oxide.
- Method of Test for Distillation of Crude Petroleum.
- Method of Test for Autogenous Ignition Temperatures.
- Method of Test for Gravity of Petroleum and Petroleum Products.
- Definitions of Terms Relating to Petroleum.

Road Materials:

- Method of Test for Abrasion of Gravel.
- Recommended Practice for Bituminous Paving Plant Inspection.

Coal and Coke:

- Method of Test for Cubic Foot Weight of Bituminous Coal.
- Method of Test for Cubic Foot Weight of Coke.
- Method of Test for Sieve Analysis of Coke.
- Method of Tumbler Test of Coke.

Insulating Materials:

- Methods of Testing Varnished Cloth Tapes.

Rubber Products:

- Specifications for Cotton Rubber-Lined Fire Hose.
- Methods of Chemical Analysis of Rubber Products.

Textile Materials:

- Specifications and Tolerances for 23/5/3 Carded American Tire Cord.
- Specifications for Tolerances and Test Methods for Asbestos Yarns.

Thermometers:

- Specifications for Thermometers for Engler Viscosimeters.

These tentative standards will appear in Part I of the Proceedings for this year and in the 1928 Book of A.S.T.M. Tentative Standards.

- Test for Cloud and Pour Points of Petroleum Products (D 97 - 27 T), revised as recommended by Committee D-2.
- Testing Gas Oils (Gravity, Distillation, Sulfur, Carbon Residue, Pour Point, Viscosity, Water) (D 158 - 25 T), recommended by Committee D-2.
- Test for Carbon Residue of Petroleum Products (Conradson Carbon Residue) (D 189 - 27 T), revised as recommended by Committee D-2.
- Decantation Test for Sand and Other Fine Aggregates (D 136 - 22 T), recommended by Committee D-4.
- Test for Distillation of Cresote Oil (D 246 - 27 T), revised as recommended by Committee D-7.
- Test for Steam Distillation of Bituminous Protective Coatings (D 255 - 26 T), recommended by Committee D-8.

Tentative Definitions of:

- Terms Relating to the Gypsum Industry (C 11 - 27 T), recommended by Committee C-11.
- Terms Relating to Lime (C 51 - 24 T), revised as recommended by Committee C-7.
- The Term Sand (C 58 - 26 T), recommended by Committee E-8.
- Terms Relating to Refractories (C 71 - 27 T), revised as recommended by Committee C-8.

AMERICAN SOCIETY FOR TESTING MATERIALS BULLETIN

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Number 33

July 31, 1928

A Message from the President

IN its standards and tentative standards our Society has stored up an accumulative monument of its work since its organization. These do not testify to all of the work of the Society by any means, for the numerous technical papers that have been presented to the Society and contacts that have been made are and have been extremely valuable. Its standards and tentative standards, however, are concrete manifestations of its continuous service.

Methods of tests lead naturally to specifications. In developing methods of tests, as well as in the developing of specifications, the procedure must of necessity be more or less empirical. Conditions, not theories, confront us. Although our knowledge of materials has been increasing, very often, for want of fuller knowledge, nothing beyond the empirical could be done nor could specifications be developed except to meet specific needs.

It has been found essential that something in the nature of generalization should be made both in reference to our methods of testing and to the definitions which the Society had directly or indirectly adopted. It was wise, therefore, for the Society to appoint two correlating committees: one on methods of testing, to study the fundamentals of testing, and one on definitions which should seek to harmonize the uses of the various terms which have been more or less a matter of standardization.

By these developments we have undertaken to bring our standards into orderly relationship one with the other. This means that our standards are becoming rationalized. Rationalization supplements the empirical procedure which of necessity is the procedure which must first be followed. Just how far rationalization will go I do not know, but I venture to predict that it will become more and more an important factor. We must know the reasons for our standards and specifications. This is true of our methods of tests and of all of our research problems. Where we have empirical formulas, in time they should develop into rational formulas.

I wish I could be more specific, but that is impossible at the moment.

This suggestion supplements that made by our honored president for the past term, Dr. H. F. Moore, when he made a plea for more of the spirit of research—for the spirit of research means the ardent desire to know more of what is back of things.

The Society has honored me by electing me its President. My simple message is: Let us more and more seek for the reasons that lie back of the problems confronting us.

G. W. Thompson

Promotion of Knowledge of Materials

Possibly the most outstanding feature of the recent annual meeting is the increasing recognition of the fundamental importance of the work of the Society in promoting our knowledge of engineering materials. No doubt this is due in part to the growth and ever-increasing activities of the Society which naturally bring these activities into greater prominence, but it is probably due in greater measure to the ever-increasing need which industry finds for knowledge concerning the qualities of materials and their behavior under various conditions of service. This demand for information on the part of industry is evident by the amount of research which industrial establishments themselves are carrying on and in the research programs which are being fostered in industrial associations, in the technical schools and in associated experimental stations. The importance of this investigational work is reflected in an editorial which recently appeared in one of the leading technical journals, which comments in part as follows:

Present indications are for continuing growth of this movement. One incentive arises from standardization and simplification of products, which reveal at every turn the insufficiency of present knowledge and industrial skill as a basis for satisfactory standards. It is therefore natural that the American Society for Testing Materials, chief of our active standardizing bodies, should be a great center for the publication and discussion of investigative problems; and for the same reason its widening field is bound to make this part of its work yet more important. The study of test materials and methods, originally its sole concern but later outranked by the formulation of standards, may yet resume the position of its major activity. But even apart from any single society, the technical and industrial growth of the country is now so closely interwoven with investigation of materials as to make it certain that this field will remain intensely active for a long time to come.

One thing is true, that industry is constantly bringing new problems to the Society for study, and our committees find no paucity of opportunities for carrying on fruitful investigations. Nor is the support of industry lacking whenever a committee undertakes such a research program.

This does not mean that the work in the development of standards will be subordinated. There has been no diminution in our standardization activities. On the contrary this work is increasing and will, we are sure, always be one of the main functions of the Society. We look on these two sides of our work, promotion of knowledge of materials and development of standards, as complementary in a very real sense—activities that must both go forward with vigor.

Discussion Will Still Be Received

Written discussion of the papers and reports presented at the recent annual meeting may be sent in to the Committee on Papers and Publications until September 1. Discussions received later may or may not be included in the Proceedings.

Amendment of By-laws Referred to Letter Ballot

At the recent annual meeting, upon recommendation of the Executive Committee, there was referred to a letter ballot vote of the Society the following amendment of the By-laws:

Amend Article VI, Section 1, by inserting the following paragraph between the third and fourth paragraphs of the present section:

Approval of modifications proposed on the floor of the annual meeting, of recommendations approved by the required letter ballot vote of the appropriate standing committee affecting standards and tentative standards, shall be contingent upon subsequent approval of such proposed modifications by letter ballot vote of the standing committees concerned; provided that if such proposed modifications fail of such subsequent approval, the original recommendations of the committee shall prevail and the proposed modifications be referred to the committee for study and report at the next annual meeting.

This modification of the procedure at annual meetings governing the action of the Society on proposed revisions of standards and tentative standards that have not received the required two-thirds vote by letter ballot of the responsible standing committee, was arrived at by joint consideration of the Executive Committee and Committee E-5 on Standing Committees and has been more fully explained in the annual reports of those committees. If adopted by required letter ballot vote the new requirement will become part also of the Regulations Governing Standing Committees.

The ballot on this proposed amendment has been made a part of the general letter ballot on adoption of standards and is inclosed with this Bulletin and will be canvassed September 1, 1928.

Forthcoming Society Publications

Year Book.—The 1928 Year Book, about 325 pages, containing the charter and By-laws, the list of members, geographical distribution of members, personnel of standing committees and list of standards and tentative standards, is now in course of preparation. This volume will be ready for distribution to all members about September 20.

1928 Supplement to the Book of A.S.T.M. Standards.—The first supplement to the 1927 Book of A.S.T.M. Standards will be issued this year, a pamphlet comprising about 185 pages, containing 31 Tentative Standards advanced to Standard and 10 replacements of existing Standards. It should be ready for distribution to members in good standing about September 20.

Book of A.S.T.M. Tentative Standards.—The Society will again issue a volume containing all of the tentative standards of the Society (185) in their latest revised form. Although the current Proceedings contain the new and revised tentative standards, many members find it a convenience to have a compilation of all tentative standards bound in one cover. The value and popularity of the volume is shown by the ever-increasing demand. Each new member, as he qualifies, is furnished with a copy of this publication. The 1928 Book should be available about October 15.

Combined Index of Standards.—As mentioned elsewhere in the BULLETIN, a combined index of all standards and tentative standards of the Society will be issued in October, complete with references to the publications in which the standards appear.

Proceedings.—The publication of the Proceedings of the recent annual meeting containing committee reports, new and revised standards, technical papers and discussions, will be taken in hand as promptly as possible. It is expected that distribution to members in good standing will be completed about December 15. The size of Parts I and II of the Proceedings will aggregate approximately 1900 pages.

Combined Index of Standards and Tentative Standards

Upon recommendation of the Committee on Papers and Publications, the Executive Committee has authorized the annual publication of a combined Index of all standards and tentative standards of the Society to be published in the form of a separate pamphlet, of which a copy will be sent to each member of the Society. In the past few years, during which the number of standards and tentative standards has grown rapidly, experience has indicated that the ease of reference to the standards and tentative standards and indeed their usefulness will be greatly facilitated by the publication and wide distribution of the proposed Index. The reference in the combined Index to a specification, method of test or definition, under whatever subject-word indexed, will give the page number and the latest publication of the Society in which the particular item will be found. The Index, which will comprise about 80 pages, will be printed in paper cover and will be published and distributed as soon after the appearance of the current Book of Tentative Standards as possible.

The publication of this Index, which it is believed will prove of distinct value to all users of the Society's publications, has been made possible by the increased financial support of Society work through the company membership dues.

Company Members

Substantial progress can be recorded in the acquisition of membership of companies, firms, corporations, industrial associations and commercial testing laboratories under the increased dues of \$30 effective this year. Up until June 1, the date of the quarterly report to the Executive Committee, there were 1007 such memberships carried over from the company members of 1927, to which should be added 61 new company members thus far in 1928 and 24 memberships transferred from individuals to companies, making a total company membership on that date of 1092. This figure is a very gratifying evidence of the value of Society work to industry and the desire of industry to lend increased financial support to that work.

Secretary to Visit Pacific Coast

As an outcome of consideration given by the Executive Committee of the Society to the development of A.S.T.M. interests on the Pacific Coast and the establishment of closer contacts with our far western members, especially in relation to the investigative and standardization work of the Society, the Secretary-Treasurer will visit this October the principal industrial and engineering centers of the Pacific Coast for the purpose of discussing these matters at first hand with the members of that section. The importance to the Society of this problem may be appreciated from the fact that, despite the 3000 miles separating the Pacific Coast from Society headquarters, that district stands fourth (of nine into which the country has been divided for membership purposes) in proportion of A.S.T.M. membership to population and to capital invested in the manufacturing industries. Requests have come that means be provided for closer coordination of our strong western membership in the activities of the Society, particularly in committee work.

The Secretary hopes to have the pleasure of meeting personally a great many of the Society members during his visit in the far western states.

American Year Book

The members will be interested in the appearance of the American Year Book for the year 1927. This is a yearly publication founded upon the plan of including the main fields of investigation, expert knowledge and professional publication in each of the 27 divisions of the work, the articles being written by men chosen because of their intimate knowledge of their subjects.

The book is divided into seven parts as follows: Part I: Historical; Part II: American Government; Part III: Governmental Functions; Part IV: Economics and Business; Part V: Social Conditions and Aims; Part VI: Science—Principles and Application; Part VII: The Humanities. The division which would no doubt be of most interest to the members is the one relating to science which includes chapters on Mathematics and Astronomy, Engineering and Construction, Physical Sciences, Chemistry and Physics, Biological Sciences, Medical Sciences and Philosophical and Social Sciences. The contact with the work of the Society is in connection with the chapter on Engineering and Construction which covers Structural Engineering, Mechanical Electrical Engineering, Automotive Engineering, Naval Architecture and Engineering, Commercial Marine Engineering, Materials of Engineering and Construction, Industrial Standardization, Commercial Aviation, World Position of American Machinery, and Cognate Societies, the section on Materials of Engineering and Construction having been prepared by the Secretary-Treasurer of the Society.

The book is on sale, and information concerning it may be secured upon application to the publishers, Doubleday Doran and Company, Inc., Garden City, N. Y.

Special Committee Reprints

Following the custom of the past few years, several committees of the Society are getting out special reprints, either of the report of the committee as presented at the recent annual meeting or a compilation of the various standards and tentative standards that have been developed by that committee. These reprints have a special value in that they make available in convenient form the standards applying to a given field. These are now in press as follows:

Reprint of the **1928 Report of Committee A-5 on Corrosion of Iron and Steel** (34 pages, 5 insert plates), containing the results of the atmospheric corrosion tests on copper-bearing and non-copper-bearing sheets, results of total immersion tests on the same material and the first reports on an investigation on atmospheric corrosion of galvanized material. Single copies, 75 cents.

A pamphlet (270 pages) containing the **1928 Report of Committee D-2 on Petroleum Products and Lubricants** together with 29 standards and 16 tentative methods of test relating to petroleum and petroleum products. Single copies, \$1.00.

Reprint of the **Report on the Significance of Tests Relating to Petroleum Products** submitted with the 1928 report of Committee D-2 on Petroleum Products and Lubricants, a discussion of the various methods of test applicable to petroleum products, a pamphlet of 54 pages. Single copies, 50 cents.

A pamphlet (160 pages) containing the **1928 Report of Committee D-9 on Electrical Insulating Materials** containing 4 standard and 15 tentative specifications and methods of test relating to electrical insulating materials. Single copies, 80 cents.

International Standardization

Several important developments have taken place during the year in the discussions relating to international standardization that have been mentioned in previous issues of the BULLETIN. They may be summarized as follows:

First.—It has been agreed that the International Electrotechnical Commission will not expand its field and will continue its standardization activity in electrotechnical matters in which it is recognized as the authoritative international body, but cooperating with other international bodies. The proposed expansion of the U. S. National Committee of the I.E.C. has not been further considered.

Secondly.—It now appears that the plans for the formal organization of an International Federation of National Standardizing Associations (I.S.A.) will not be carried through; for while the national standardizing bodies of the continental European nations had ratified the articles of constitution and plans for preliminary organizations, the plan failed to receive the approval of the British Engineering Standards Association. The American Engineering Standards Committee had not reached a decision. Consideration is being given to an organization of less formal character and in the meantime it is planned to continue the informal coordination of standardizing activities by the establishment of an international clearing house in Switzerland.

Pending further development and formation of suitable agencies for bringing about international cooperation in standardization activities, the Executive Committee will handle matters relating to international discussion of materials standards through whatever channels seem best suited to the purpose. In matters of general standardization, the Society looks to the American Engineering Standards Committee as a clearing house, since that committee is in formal touch with the national standardizing bodies of the world. It is believed that the New International Association for Testing Materials is a logical medium for the international consideration of tests and properties of materials.

Bibliography on Effect of Temperature on Metals

A bibliography on effect of temperature on the properties of metals prepared by the Joint Research Committee of the A.S.M.E. and A.S.T.M. on the Effect of Temperature on the Properties of Metals has been issued as an A.S.M.E. research publication by the American Society of Mechanical Engineers. The bibliography is indexed chronologically (1825–1928) and by authors, and contains a subject index as well. A number of copies have been secured for distribution and are available upon application to the Society's headquarters at 75 cents per copy. A reduction in price is made for quantities over 100.

Society Appointments

Announcement is made of the following appointments:

E. S. Dixon, Metallurgist, The Texas Co., Port Arthur, Texas, as a member of the Joint Research Committee on Effect of Temperature on the Properties of Metals.

F. N. Speller, Director, Department of Metallurgy and Research, National Tube Co., Pittsburgh, Pa., as Society's representative at a Conference on Pipe Nipples held under the auspices of the Commercial Standards Unit.

R. E. Hess, Assistant Secretary of the A.S.T.M., as the Society's representative on the Sectional Committee on Wire and Sheet Metal Gages.

G. W. Thompson, Chief Chemist, National Lead Co., Brooklyn, N. Y.; J. A. Capp, Chief of Testing Laboratory, General Electric Co., Schenectady, N. Y.; and Cloyd M. Chapman, Consulting Engineer, New York City, as a special committee to confer with the American Committee on World Engineering Congress.

COMMITTEE ACTIVITIES

Space in the BULLETIN is reserved for items of interest about committee activities. Officers of committees are invited to prepare information of suitable character for publication.

New Committee Officers

In accordance with the Regulations Governing Standing Committees the elections for officers were held this year. These elections resulted in changes in the officers of standing committees as noted below:

COMMITTEE A-1 ON STEEL.

Secretary: V. H. Lawrence, Metallurgical Engineer, Steel Works Dept., Alan Wood Iron and Steel Co., Conshohocken, Pa.

COMMITTEE A-3 ON CAST IRON.

Chairman: Hyman Bornstein, Director of Laboratories, Deere and Co., Moline, Ill.

Secretary: F. B. Coyle, Research Metallurgist, International Nickel Co., Bayonne, N. J.

COMMITTEE B-2 ON NON-FERROUS METALS AND ALLOYS.

Secretary: E. E. Thum, Associate Editor, *Iron Age*, 239 W. 39th St., New York City.

COMMITTEE C-5 ON FIRE TESTS OF MATERIALS AND CONSTRUCTION.

Chairman: R. P. Miller, Consulting Engineer, The Architects' Building, 101 Park Ave., New York City.

Secretary: Fitzhugh Taylor, Underwriters' Laboratories, 207 E. Ohio St., Chicago, Ill.

COMMITTEE C-6 ON DRAIN TILE.

Secretary: W. J. Schlick, Drainage Engineer, Engineering Experiment Station, Iowa State College, Ames, Iowa.

COMMITTEE C-7 ON LIME.

Secretary: W. V. Brumbaugh, Technical Director, National Lime Association, 927 Fifteenth St., N. W., Washington, D. C.

COMMITTEE D-4 ON ROAD AND PAVING MATERIALS.

Chairman: R. W. Crum, Director of Highway Research, National Research Council, 21st and B Sts., Washington, D. C.

COMMITTEE D-11 ON RUBBER PRODUCTS.

Chairman: L. C. Conradi, Spicer Manufacturing Corp., South Plainfield, N. J.

Vice-Chairman: C. R. Boggs, Factory Manager, Simplex Wire and Cable Co., 201 Devonshire St., Boston, Mass.

Secretary: Arthur W. Carpenter, The B. F. Goodrich Co., Akron, Ohio.

COMMITTEE D-13 ON TEXTILE MATERIALS.

Chairman: W. H. Whitcomb, Director of Laboratory Control, Footwear Division, U. S. Rubber Co., Box 606, New Haven, Conn.

Vice-Chairmen: K. B. Cook, Technical Superintendent, Manville-Jenckes Co., Pawtucket, R. I.

D. C. Scott, Secretary and Treasurer, Henry L. Scott Co., 101 Blackstone St., Providence, R. I.

Secretary: D. G. Woolf, Associate Editor, *Textile World*, 334 Fourth Ave., New York City.

COMMITTEE D-16 ON SLATE.

Chairman: W. B. Plank, Lafayette College, Easton, Pa.

Vice-Chairman: Oliver Bowles, U. S. Bureau of Mines, New Brunswick, N. J.

COMMITTEE E-1 ON METHODS OF TESTING.

Chairman: W. H. Fulweiler, Chemical Engineer, United Gas Improvement Co., Broad and Arch Sts., Philadelphia, Pa.

Committee on 1929 Marburg Lecture

The Executive Committee has appointed the committee to select the Edgar Marburg lecturer for 1929. Under the rules governing the Lecture this committee consists of a member of the Executive Committee, a member of Committee E-9 on Correlation of Research and a member of Committee E-6 on Papers and Publications. The personnel is as follows: T. R. Lawson, Head, Department of Civil Engineering, Rensselaer Polytechnic Institute, Troy, N. Y., appointed from the Executive Committee; H. F. Moore, Professor of Engineering Materials, University of Illinois, Urbana, Ill., appointed from Committee E-9; and Jerome Strauss, Chief Research Engineer, Vanadium Corporation of America, Bridgeville, Pa., appointed from Committee E-6. Professor Moore will serve as chairman of the committee.

Funds for Research on Corrosion of Non-Ferrous Metals and Alloys Being Raised

Committee B-3 on Corrosion of Non-Ferrous Metals and Alloys has announced a comprehensive program in the study of atmospheric, liquid and electrolytic corrosion of a number of types of non-ferrous metals and alloys. To this program has recently been added, upon recommendation of Committee B-2, corrosion studies of die-casting alloys. The committee is engaged in raising a fund of \$6500 to support these investigations and acknowledgment is made of the following subscriptions that have so far been made towards this fund:

Allegheny Steel Co....	\$250.00	International Silver Co.	\$100.00
Allis-Chalmers Mfg. Co.....	100.00	National Lead Co.....	250.00
Aluminum Company of America.....	250.00	New Jersey Zinc Co...	250.00
American Brass Co....	250.00	Northern Electric Co.	250.00
Bell Telephone Laboratories.....	250.00	St. Joseph Lead Co...	250.00
Chase Metal Works...	150.00	Scovill Manufacturing Co.....	250.00
Crane Company.....	200.00	Speakman Company...	50.00
De Laval Separator Co.	250.00	Stewart Die Casting Co.....	250.00
Detroit Edison Co.....	100.00	Sun Oil Co.....	100.00
Doehler Die Casting Co.....	250.00	Tallman Brothers.....	50.00
Doherty Co., H. L.....	50.00	Western Electric Co...	250.00
du Pont de Nemours & Co.....	150.00	Western Union Telegraph Co.....	150.00
General Electric Co....	250.00	Westinghouse Elec. and Mfg. Co.....	250.00
Grasselli Chemical Co.	100.00		
International Nickel Co.....	250.00		\$5300.00

Details of the investigation as planned appear in the reports of Committee B-3 for 1927 and for 1928. Further information regarding this work may be obtained from the chairman of the committee, Mr. T. S. Fuller, General Electric Co., Schenectady, N. Y., or from any members of the committee in charge of raising the fund, which consists of W. M. Corse, 810 Eighteenth St., N. W., Washington, D. C. (chairman), W. H. Bassett, American Brass Co., Waterbury, Conn., W. H. Finkeldey, Singmaster & Breyer, 420 Lexington Ave., New York City, W. M. Peirce, New Jersey Zinc Co., Palmerston, Pa., and Sam Tour, 123 North Street, Batavia, N. Y.

A number of companies still have under consideration the request to subscribe to this fund and it is hoped that the entire sum of \$6500 will soon be raised.

The thanks of the Society are extended to all who are lending financial or other support to this important work.

Appointments to Committee E-6 on Papers and Publications

The Executive Committee has appointed the following members of the Society to serve on the Committee on Papers and Publications for the ensuing term of three years: T. G. Delbridge, Process Supervisor, Atlantic Refining Co., Philadelphia; H. C. Knerr, Consulting Metallurgical Engineer, Philadelphia; and F. E. Richart, Research Assistant Professor, Engineering Experiment Station, Laboratory of Applied Mechanics, University of Illinois. These members have been quite active in Society affairs and will bring valuable experience into the activities of this important committee.

American Engineering Standards Committee Activities

During the past year the American Engineering Standards Committee has extensively revised its Rules of Procedure to make them sufficiently flexible to fit all of the varied conditions that are met with in the wide range of industrial subjects covered by A.E.S.C. activities. Experience has indicated the necessity for recognizing different methods of formulating standards to fit different conditions. The methods now recognized are founded on the principle that the basic test to be applied in all cases is the fact of the assent, affirmatively expressed, of the groups having substantial interest in a proposed standard. Such groups are to have an inherent right to representation on the committee or other body dealing with the subject matter of the standard, but it is not essential that this right be exercised.

The principal change in procedure in which the Society is interested is that which recognizes so-called "proprietary" standards, that is, standards developed by technical societies and similar bodies having the making and promulgation of standards as a specific function. Under this revised procedure such "proprietary" standards may be offered for approval and subsequently revised within the procedure set up by the sponsor body, on the condition that it will be shown that the standard is acceptable to the various groups that are concerned with it. This method is particularly applicable to highly specialized fields in which the standard developed by an organization functioning in that field has already achieved a position of recognized eminence.

Proposal to Revise A.E.S.C. Constitution

The A.E.S.C. has submitted to its member bodies for ratification a revised Constitution in which are embodied a number of modifications designed to improve its methods of functioning and make a greater appeal for industrial support. Acceptance of the revised Constitution by three-fourths of the member bodies is necessary for ratification. The Executive Committee is studying the new Constitution in consultation with the Society's representatives on the A.E.S.C. and it is expected that definite action will be taken at the October meeting of the committee.

A.S.T.M. Standards Approved

The following specifications and methods of test of the Society have recently been approved as American Standard under A.E.S.C. procedure:

Specifications for:

- Soft or Annealed Copper Wire (B 3 - 27)
- Tinned Soft or Annealed Copper Wire for Rubber Insulation (B 33 - 21)
- Portland Cement (C 9 - 26)

Methods of Test for:

- Abridged Volume Correction Table for Petroleum Oils (D 206 - 25)
- Analysis of Grease (D 128 - 27)
- Burning Quality of Kerosine Oil (D 187 - 27)
- Burning Quality of Long Time Burning Oil for Railways (D 219 - 27)
- Burning Quality of Mineral Seal Oil (D 239 - 27)
- Distillation of Gasoline, Naphtha, Kerosine and Similar Petroleum Products (D 86 - 27)
- Distillation of Natural Gas Gasoline (D 216 - 27)
- Flash Point by Means of Pensky-Martens Closed Tester (D 93 - 22)
- Melting Point of Paraffin Wax (D 87 - 22)
- Sulfur in Petroleum Oils Heavier Than Illuminating Oils (D 129 - 27)
- Thermal Value of Fuel Oil (D 240 - 27)
- Viscosity of Petroleum Products and Lubricants (D 88 - 26)
- Flash and Fire Points by Means of Open Cup (D 92 - 24)

The following three methods of test have been approved as Tentative American Standard:

- Cloud and Pour Points of Petroleum Products (D 97 - 27 T)
- Neutralization Number of Petroleum Products (D 188 - 27 T)
- Penetration of Greases and Petrolatum (D 217 - 27 T).

Three other A.S.T.M. standard methods relating to petroleum products will shortly be recommended to the A.E.S.C. for approval as American Standard, namely,

- Steam Emulsion of Lubricating Oils (D 157 - 27)
- Water in Petroleum Products and Other Bituminous Materials (D 95 - 27)
- Water and Sediment in Petroleum Products by Means of Centrifuge (D 96 - 24).

Reports of Sectional Committees

At the recent annual meeting there were presented reports from several sectional committees for which the Society is sponsor or co-sponsor:

Fire Hose.—Proposed Specifications for Cotton Rubber-Lined Fire Hose for Public and Private Fire Department Use were submitted by the sectional committee on this subject organized under the sponsorship of the A.E.S.C. Fire Protection Group and the Society. The specifications were reviewed by Committee D-11 on Rubber Products, upon whose recommendations they were accepted, with the omission of two notes, for publication as tentative and at the same time the two A.S.T.M. standard specifications for fire hose (D 14 - 23 and D 26 - 23) have been withdrawn. The Society has inquired of the Fire Protection Group whether the omission of the two notes in question will meet its approval so the specifications may be submitted to the A.E.S.C. for approval as Tentative American Standard.

Copper Wire.—The sectional committee on this subject, the personnel of which is coincident with the Society's Committee B-1 on Copper Wire, has recommended that the A.S.T.M. Specifications for Hard-Drawn Copper Wire be submitted to the A.E.S.C. for approval as American Standard. The recommendation has been approved and the specifications will be offered shortly.

The committee has formed a sub-committee to study the question of proper specifications for wire and cable for the construction of electric power lines.

Zinc Coatings.—This sectional committee, which functions under the sponsorship of the Society, submitted two specifications at the annual meeting, one a Specification for the Zinc Coating on Iron and Steel Sheets and the other a Specification for Zinc (Hot-Galvanized) Coatings on Structural Steel Shapes, Plates and Bars and Their Products. The first named specification is simply a portion of the requirements for zinc coatings in the A.S.T.M. Standard Specifications for Zinc-Coated (Galvanized) Sheets (A 93 - 27) and were accepted for ultimate submission to the A.E.S.C. The second of the two specifications was accepted for publication as a tentative standard of the Society.

The sectional committee also reported progress in the development of Specifications for Zinc Coatings on Wire and Wire Products and on Pipe and Fittings, offering specifications covering the latter for publication as information.

Insulated Wire and Cables.—As co-sponsor with other organizations for the development of specifications for insulated wire and cables, the Society at the recent annual meeting formally adopted the American Standard Specifications for 30 per-cent Rubber Insulation for Wire and Cable for General Purposes prepared by the sectional committee. This action was taken upon the recommendation of Committee D-11, which has incorporated these specifications as the section on insulation of the Society's Specifications for Insulated Wire and Cable: 30-per-cent Hevea Rubber (D 27 - 28 T), replacing the former requirements which had been used as a basis for this portion of the committee's work.

Sectional Committee on Pipe and Tubing Organized

The American Society of Mechanical Engineers and the A.S.T.M., having accepted sponsorship for the development of standards for wrought-iron and wrought-steel pipe and tubing under the procedure of the American Engineering Standards Committee, formed a representative sectional committee on this subject, which held its organization meeting in Pittsburgh on May 18. In all some 30 organizations have been invited to participate in this work through representation on the sectional committee and the present personnel, which is practically complete, is as follows:

Am. Soc. for Testing Materials.....	H. H. Morgan F. N. Speller L. W. Spring G. H. Woodroffe D. S. Jacobus H. C. Heaton H. B. Oatley
Am. Soc. of Mechanical Engrs.....	V. M. Frost (alternate) A. M. Houser H. H. Murray W. W. Eaton (alternate)
Am. Boiler Mfgs. Assn.....	H. C. Cooper S. H. Shipley
Am. Gas Assn.....	H. C. E. Meyer
Am. Inst. of Refrigeration.....	F. C. Fyke
Am. Marine Standards Committee.....	L. D. Burritt (alternate)
Am. Petroleum Inst.....	F. M. Waring
Am. Railway Assn., Mechanical Div.....	J. J. Laudig
Am. Railway Engineering Assn.....	W. B. Nissly (alternate) Morris Knowles W. V. McCray (alternate)
Am. Soc. of Civil Engineers.....	F. N. Speller
Am. Water Works Assn.....	L. B. Grindlay
Assn. of American Steel Mfgs.....	G. A. Reinhardt A. L. Penniman, Jr. A. B. Morgan (alternate)
Electric Light and Power Group.....	I. J. Fairchild
Federal Specifications Board.....	W. R. Rhoton
Heating and Piping Contractors National Assn.....	J. C. Fitts (alternate)
Manufacturers Standardization Soc. of the Valve and Fittings Industry.....	F. H. Morehead
National District Heating Assn.....	Sabin Crocker
National Pipe and Supplies Assn.....	R. K. Hanson
Navy Department, Bureau of Engineering.....	Design Division
New England Water Works Assn.....	R. S. Weston
Pipe Nipple Standards Corp.....	F. M. Wiedeman
Pittsburgh Testing Laboratory.....	A. R. Ellis
Power Piping Society.....	H. LeRoy Whitney
Refrigerating Machinery Assn.....	W. R. Kremer A. H. Baer (alternate)
Soc. of Naval Architects and Marine Engrs.....	V. B. Edwards
United States War Department.....	F. A. McMahon W. V. McCray (alternate)
Members at Large.....	J. B. Aston A. E. White
Producers.....	13
Consumers.....	15
General Interests.....	6
	34
Liaison Members.....	1

For the present the scope of the sectional committee's work has been defined as follows:

Standardization of the design, dimensions and material of welded wrought-iron pipe, of welded and seamless steel pipe, and of boiler tubing, including pipe and tubing for high temperatures and pressures.

The sectional committee will consider the principal specifications for these products now in existence and will in so far as possible endeavor to harmonize them and bring about the adoption of a group of American Standards covering the respective products.

The sectional committee effected temporary organization, electing as temporary chairman Mr. H. H. Morgan and as temporary secretary Mr. Sabin Crocker. The appointment

of the following four sub-committees was authorized and the temporary chairmen elected:

Sub-Committee No. 1 on Plan, Scope and Editing (consisting of the chairman, secretary and chairmen of the other sub-committees), H. H. Morgan, temporary chairman.
Sub-Committee No. 2 on Pipe and Tubes for Low Temperature Service, G. A. Reinhardt, temporary chairman.
Sub-Committee No. 3 on Pipe and Tubes for High Temperature Service, H. H. Murray, temporary chairman.
Sub-Committee No. 4 on Materials, F. H. Morehead, temporary chairman.

The Sub-Committee on Plan, Scope and Editing held its first meeting at Atlantic City during the annual meeting of the Society.

Weathering Characteristics of Building Materials

The important influence of the weathering characteristics on the life and service of various types of building materials has led four committees of the Society to form a small joint committee to coordinate the studies being made of weathering characteristics of brick, hollow tile, slate and natural building stones. This action has been taken on the recommendation of Committee E-9 on Correlation of Research which has considered the subject to be a research problem of outstanding importance. The committees and their representatives on the coordinating committee are:

C-3 on Brick.....	D. E. Parsons
C-10 on Hollow Masonry Building Units.....	H. D. Foster
D-16 on Slate.....	D. W. Kessler
D-18 on Natural Building Stones.....	H. S. Brightly (H. H. Dutton, alternate)

Mr. Kessler has been designated as chairman of this group, of which much is expected in the way of stimulating a study of weathering characteristics of these materials.

Society Endorses Proposed Survey of Gas Coals

Taking favorable action upon a recommendation of Committee D-5 on Coal and Coke, the Executive Committee of the Society has given its endorsement to the comprehensive survey of the gas and coking coals which it is proposed shall be made by the National Government. The importance of a survey of the gas-making and coke-making properties of the coals of the United States is a matter of great economic importance, comparable to a similar investigation on steam coals. The Executive Committee has designated Dr. Horace C. Porter, Chemical Engineer, Philadelphia, Vice-Chairman of Committee D-5, to represent the Society in a joint effort with other national bodies to further the plans for the proposed survey.

Proceedings of the International Congress for Testing Materials

The Proceedings of the International Congress for Testing Materials held in Amsterdam in September of 1927 are now off press. These Proceedings contain all of the papers presented at the Congress, each one reproduced in the language in which it was presented, either English, German or French. The inclosed prospectus lists the various papers contained in the Proceedings and contains information in respect to ordering copies. Orders should be addressed to the publishers.

New Members to July 31, 1928

The following 91 members were elected from April 25 to July 25, 1928, making the total membership 4243:

Company Members (25)

American Creosoting Co., C. G. Crawford.
American Rubber Manufacturing Co., The, J. L. Dodge.
American Schaeffer & Budenberg Corp., Hamilton Merrill.
Asfalto del Mariel, S. A.
Boston Store of Chicago, Inc., Alex. Steiner.
Brittains Limited, Alfred Haigh.
Canada Gypsum and Alabastine, Ltd., G. M. Thomson.
Carr Chain Works, Inc., J. H. Woodhouse.
Clay Products Institute of California, S. C. Simons.
Crucible Steel Co. of America, C. E. Edgerton.
Edgewater Steel Co., F. B. Bell.
Filtrol Co., W. S. Baylis.
Flintkote Co., L. Kirschbraun.
Foxboro Co., The, B. H. Bristol.
Gray Processes Corp., The.
Groupement Professionnel des Fabricants de Ciment Portland Artificiel de Belgique, Raoul Dutron.
Hendrick Manufacturing Co., W. H. Hamilton.
Henley's Telegraph Works Co., Ltd., W. T., P. Dunsheath.
Ohio Quarries Co., The, C. R. Yanson.
Richards Co., Inc., G. H. Allen.
Shell Co. of California, P. A. L. Engelbregt.
Sloan Valve Co., L. G. Swenson.
Sociedad Espanola de Construcción Naval, J. A. Suanzes.
Standard Lime and Stone Co., The, W. J. Young.
Star Expansion Bolt Co., R. E. Ogden.

Individual and Other Members (59)

Alten, G. H. (Alten's Foundry and Machine Works).
Armour Institute of Technology Library.
Auburn, City of, J. J. Tehan.
Austin, City of, O. E. Metcalfe.
Bainbridge, W. C. (H. Kohnstamm and Co., Inc.).
Bates, L. I. (Bronx Gas and Elec. Co.).
Berger, O. H. (Macasphalt Corp. of America).
Brayer, E. H. (Road Construction).
Carpenter, A. C. (Lesh Oil Co.).
Cook, W. L. (Reliable Elec. Co.).
Coyle, F. B. (International Nickel Co.).
De Castro, M. A. T. (Cia Brasileira de Cimento Portland).
Dentler, A. E. (W. H. Miner, Inc.).
Dobrovolny, F. J. (The Roessler and Hasslacher Chemical Co.).
Dobson, W. P. (Hydro Elec. Power Commission of Ontario).
Esselen, G. J., Jr. (Skinner, Sherman and Esselen, Inc.).
Flaherty, J. H. (Jones and Laughlin Steel Corp.).
Foote, P. D. (Mellon Inst. of Industrial Research).
Freedman, Ephraim (R. H. Macy and Co., Inc.).
Gaskell, R. H. (Wm. Gaskell and Son, Inc.).
Gilpin, F. H. (The Texas Co.).
Hageboeck, A. E. (Frank Foundries Corp.).
Hamilton, C. B., Jr. (Hamilton Gear and Machine Co.).
Hartgering, J. M. (Hubbell, Hartgering and Roth).
Henkel, Fernando (Henkel Hermanos Suers.).
Imperial Japanese Navy, Inspectors Office, F. Saito.
Jones, W. H. (Murray Rubber Co.).
Kaise, K. (South Manchuria Ry. Co.).
Kentucky State Highway Dept., H. D. Palmore.
Koppers, Heinrich (Heinrich Koppers, A. G.).
Larson, L. J. (A. O. Smith Corp.).
Limh, G. H. (Victor Elec. Plaster Mills Pty., Ltd.).
Los Angeles County Health Dept., J. L. Pomeroy.
Lowry, E. J. (Consulting Metallurgist).
McArn, D. G. (Allis-Chalmers Mfg. Co.).
McCarthy, Harry (Walworth Co.).
McCorkle, I. B. (National Tube Co.).
McDermut, L. E. (Illinois Slag and Ballast Co.).
McGowen, F. H. (Consulting Engineer).
McManus, J. D. (Walworth Co.).
Mentz, H. A. (Consulting Engineer).
Myers, Bert (Iowa State Highway Commission).
Older, Clifford (Consoer, Older and Quinlan, Inc.).
Parker, Harold (United Fruit Co.).
Peace, T. C. (Robert W. Hunt Co.).
Perrine, Harold (Jones and Laughlin Steel Corp.).
Pohlman, E. C. (Materials, Inc.).
Polley, H. W. (International Compositions Co., Inc.).
Ross, E. S. (Nippon Oil Co., Ltd.).
Shettel, W. R. (Los Angeles Gas and Elec. Corp.).
Springer, William (Bristol-Myers Co.).
Staats, E. W. (Metal Door and Trim Co.).
Stephany, C. R. (Gordon & Kaelber).
Sullivan, G. P. (Independent Coal Tar Co.).
University of Manchester, C. W. E. Leigh.
Walsh, D. M. (Trinidad Central Oilfields Ltd.).
Whiteman, D. S. (Reilly-Whiteman Co.).

Wilson, J. A. (A. F. Gallun & Sons, Corp.).
Wyzalek, J. F. (Hyatt Roller Bearing Co.).

Junior Members (5)

Bowdry, W. P., Jr. (Dallas Foundry).
Clary, W. B. (Henry Souther Engineering Co.).
Glover, J. B. (Glover Machine Works).
Henderson, J. H. (Magnolia Gas Co.).
Murray, J. A. (U. S. Bureau of Standards).

Student Membership

The Student Membership on July 25, 1928, was 218 distributed as follows:

Rensselaer Polytechnic Institute.....	114
Cooper Union.....	35
Cornell University.....	24
University of Illinois.....	15
University of Michigan.....	14
Columbia University.....	5
Harvard University.....	4
Massachusetts Institute of Technology.....	4
Franklin Union.....	1
Newark College of Engineering.....	1
Virginia Polytechnic Institute.....	1
Yen Ching University.....	1

Deceased Members and Representatives

We announce with regret the death of nine members and representatives:

J. B. F. BREED, Chief Engineer, Commissioners of Sewerage of Louisville, Inc., Board of Trade Building, Third and Main Sts., Louisville, Ky. Member since 1922.
WALTER J. COOPER, Chairman, The South Wales Portland Cement and Lime Co. (1924), Ltd., Penarth, Cardiff, England. Member since 1927.
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ARTURO TITUS, Civil Engineer, Casilla 7 A, Valparaiso, Chile. Member since 1919.

Henry L. Scott

In the death of Henry L. Scott the Society has lost a very active worker in the field of textile materials. He was a prominent member of Committee D-13 on Textile Materials for a number of years and served on the Executive Committee of the Society from 1923 to 1925.

James Madison Porter

It is with keen regret that the members learn of the death of James Madison Porter, a prominent member of the Society since the time of its organization. He was affiliated with the Society when it was still the American Section of the International Association for Testing Materials and was quite active in the affairs of the Section, serving as secretary from 1900 to 1902.

Address Wanted

Persons who know the present address of the member whose name and last-known address is given below, are asked to advise the Secretary-Treasurer:

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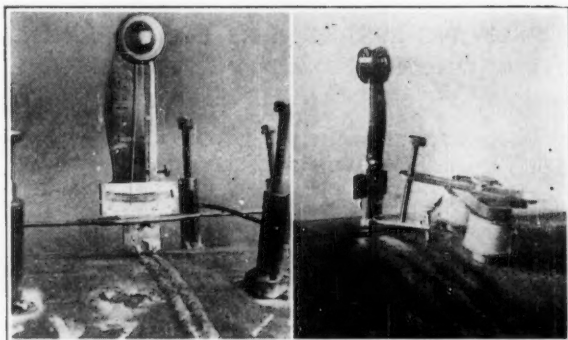
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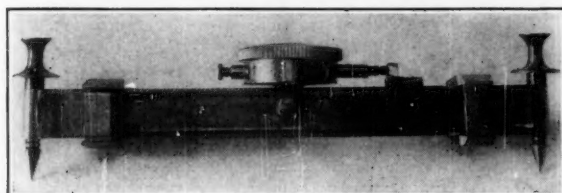
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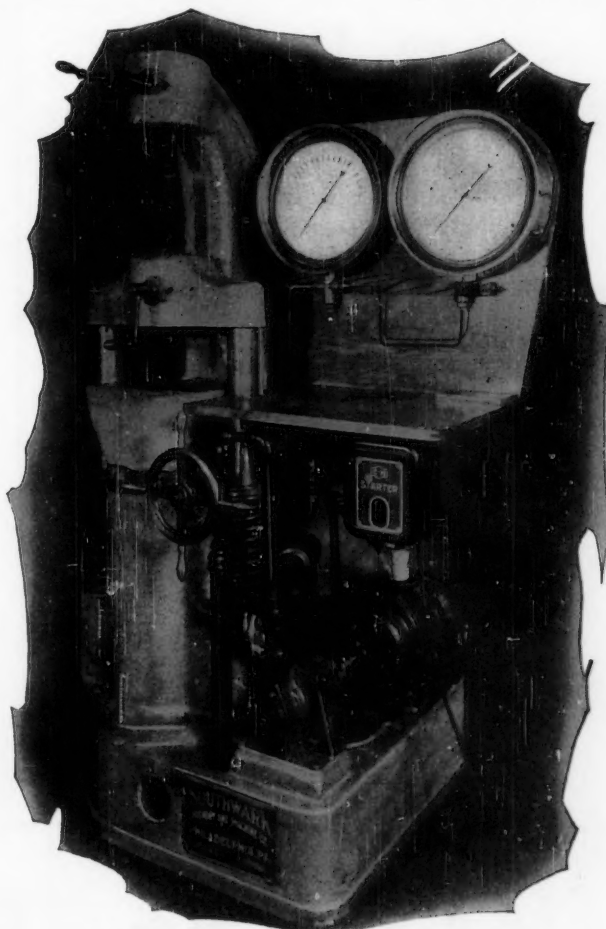
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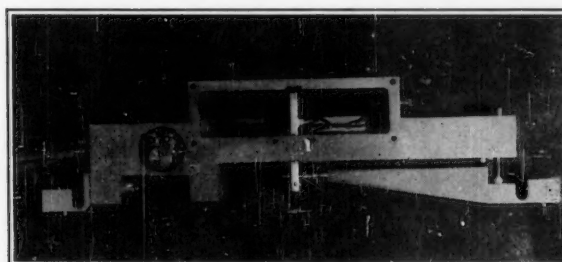
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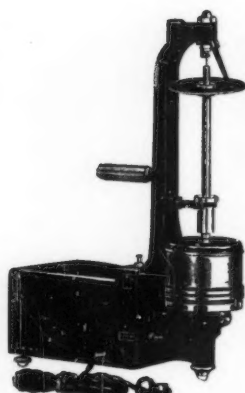


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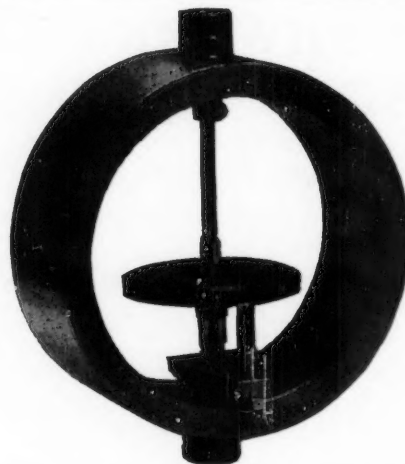
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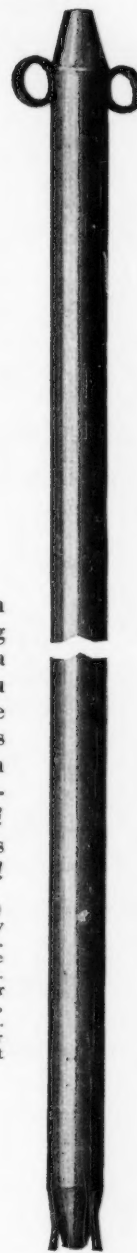
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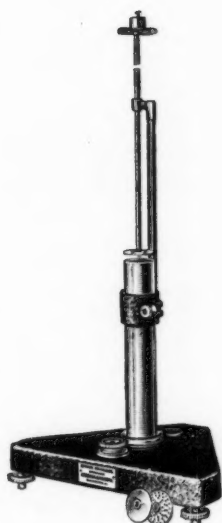
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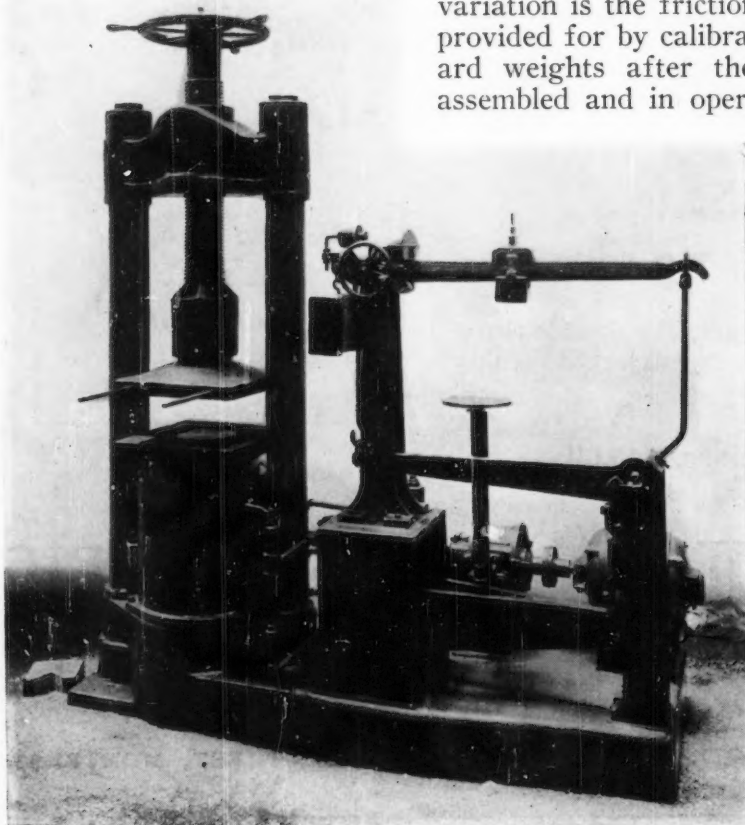
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